

# State of MMC delivery in social housing

Building  
Better



NATIONAL  
HOUSING  
FEDERATION

# Foreword by Trina Chakravarti, Building Better, and Rob Cowley, National Housing Federation

The National Housing Federation (NHF) is the voice of England's housing associations. Building Better was developed through the NHF's innovation programme, the Greenhouse, in 2018. It has since grown to become an alliance of housing associations and local authorities working together to build high quality social and affordable homes using modern methods of construction (MMC). The two organisations continue to collaborate closely.

In a volatile time for the wider construction industry, modular manufacturers have come under particular press scrutiny. Several high-profile insolvencies led to the House of Lords Built Environment Committee launching an inquiry into barriers to MMC delivery. The inquiry also explored how effective the government's approach to overcoming these barriers has been.

Against this backdrop, the skills crisis has continued to worsen and the need to improve both the quantity and quality of housing has been brought into sharp relief. We created this survey, therefore, to understand how housing associations are using offsite construction and to identify the barriers and opportunities around scaling up MMC usage.

What stands out in the survey results is that several dominant narratives around MMC have changed in a short space of time. Results show that delivery is being driven primarily by category 2 panelised construction, although category 1 volumetric construction gets much of the media attention. Furthermore, while quality issues were previously a huge barrier to increasing the use of MMC, improved quality, and lower resulting carbon emissions, are two of the biggest reasons housing associations gave for using MMC today.

**The intention for the survey is to build a national picture of the scale and ambition of MMC use across the social housing sector on an annual basis.**

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# Introduction

The National Housing Federation and Building Better have surveyed housing associations across England to find out about their use of MMC.

This report provides a snapshot of MMC delivery in the social housing sector. It outlines the number of MMC homes built by housing associations in 2022/23, along with the sector's appetite for offsite construction over the next five years. We also asked housing associations about the main benefits and barriers around MMC.

By measuring MMC numbers and capturing the mood of the sector, we hope to provide valuable insights to housing providers, manufacturers and the government.

The state of MMC delivery survey will run every year. If you'd like to take part, [get in touch at](mailto:trina.chakravarti@buildingbetter.org.uk)

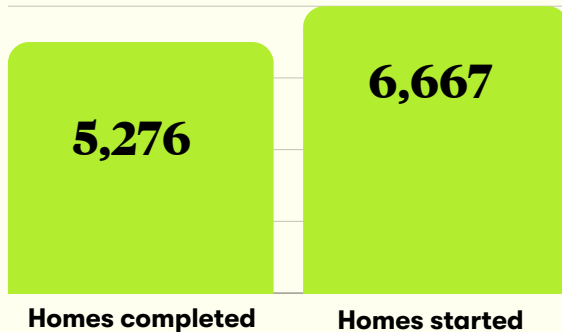
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Our next survey will open in summer 2024.



# Summary of findings

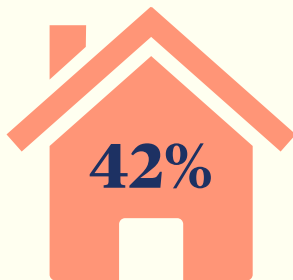
## MMC homes 2022/23:



**For housing associations that used MMC in 2022/23:**

**Nearly 1/3** of all their completions used MMC.

**Over 1/3** of all their starts on site used MMC.



**42%** of respondents said that they used MMC in 2022/23, and are planning either a modest or substantial increase.



**51%** of respondents said that their organisation expects to use either 'somewhat more' or 'much more' MMC by 2028.

**4%**

Just 4% of respondents said that their organisations were against using MMC.



### **Environmental sustainability**

was seen as the most significant benefit of MMC.



### **Supplier vulnerability**

was seen as the most significant barrier to increasing the use of MMC.

The survey was conducted between June and December, 2023. Together, the 57 housing associations which responded are responsible for 45% of all homes completed by housing associations. Respondents ranged widely in terms of organisational size, number of homes owned and geographic location.

# The data

# How many MMC homes did housing associations build?

## There were 5,276 completions by MMC.

The 57 respondents completed an estimated total of 20,900 homes in 2022/23. This includes 31 respondents that did not use MMC. Therefore, 25% of completions by all respondents was by MMC. However, the proportion was higher among the 26 respondents that used MMC. They completed a total of 16,483 homes. This means that nearly a third (32%) of their total completions was by MMC.

## There were 6,667 starts on site by MMC.

This represents 16% of total starts by all respondents and 36% of starts by respondents that used MMC.

Table 1: MMC completions and starts on site by MMC category and property type

MMC category	Completions 2022/23			Starts on site 2022/23		
	Houses	Apartments	Total	Houses	Apartments	Total
Category 1	196	160	356	326	4	330
Category 2	2,040	701	2,741	1,301	1,697	2,998
Category 2+5	681	1,498	2,179	767	2,572	3,339
<b>Total</b>	2,917	2,359	5,276	2,394	4,273	6,667

## **Split by MMC system/category**

Nearly all (93%) of the MMC completions used panelised assemblies (category 2), or panelised and non-structural assemblies (category 2 + 5).

Just over half (52%) of MMC completions used category 2, and 41% used category 2 + 5. Volumetric or category 1 accounted for just 7% of completions.

There was a noticeable difference in the category use between houses and apartments in both completions and starts on site. Category 2 was mostly used for houses while category 2 + 5 was mostly used for apartments.

## **Property type**

More houses than apartments using MMC were completed: 55% of completions were houses, 45% were apartments.

By contrast, more apartments than houses were started on site: 64% were apartments, 36% were houses. However, three respondents reported noticeably large numbers of apartments that may have been specific to a single year.

## **Delivery by Affordable Homes Programme partners**

Nearly two thirds of all MMC delivery in 2022/23 was by Homes England Strategic Partners: 62% of completions and 63% of starts on site.

Strategic Partners used a significant amount of MMC in their overall development. It contributed to a third of their total completions and 41% of their starts on site.



# The next 5 years: how many MMC homes are planned?

The survey asked respondents about the number of homes they are planning to build using MMC in the next five years: 2023/24 to 2027/28. A total of 30,591 are planned, split between houses (59%) and apartments (41%).

The survey also asked respondents about the proportion of MMC they are planning to achieve by 2027/28. Of the respondents, 11% expected to use MMC in more than half of their total completions. While 41% of respondents expected MMC to be used in at least 20% of their total completions by 2027/28.

However, over a third (35%) of respondents did not state, or were unable to say, the proportion of MMC they were planning to use by 2027/28.

These proportions can be applied to a five-year forecast of development to estimate the scale of MMC into the medium-term. The current five-year forecast for private registered providers, published by the Regulator of Social Housing (2023 Global Accounts, p.48), is 333,000 homes.



**Assuming a proportion of 20% by MMC, this suggests an appetite of 66,600 homes by MMC in the five years ending 2027/28.**

**However, the results from respondents using MMC in 2022/23 show that 32% of their development was by MMC, higher than the 20% indicated above. If this proportion continues into the medium-term, and is applied to the forecast of 333,000, this would suggest an appetite of nearly 107,000 MMC homes by 2028.**

**The sector-wide appetite for MMC homes could be closer to 107,000 by 2028.**

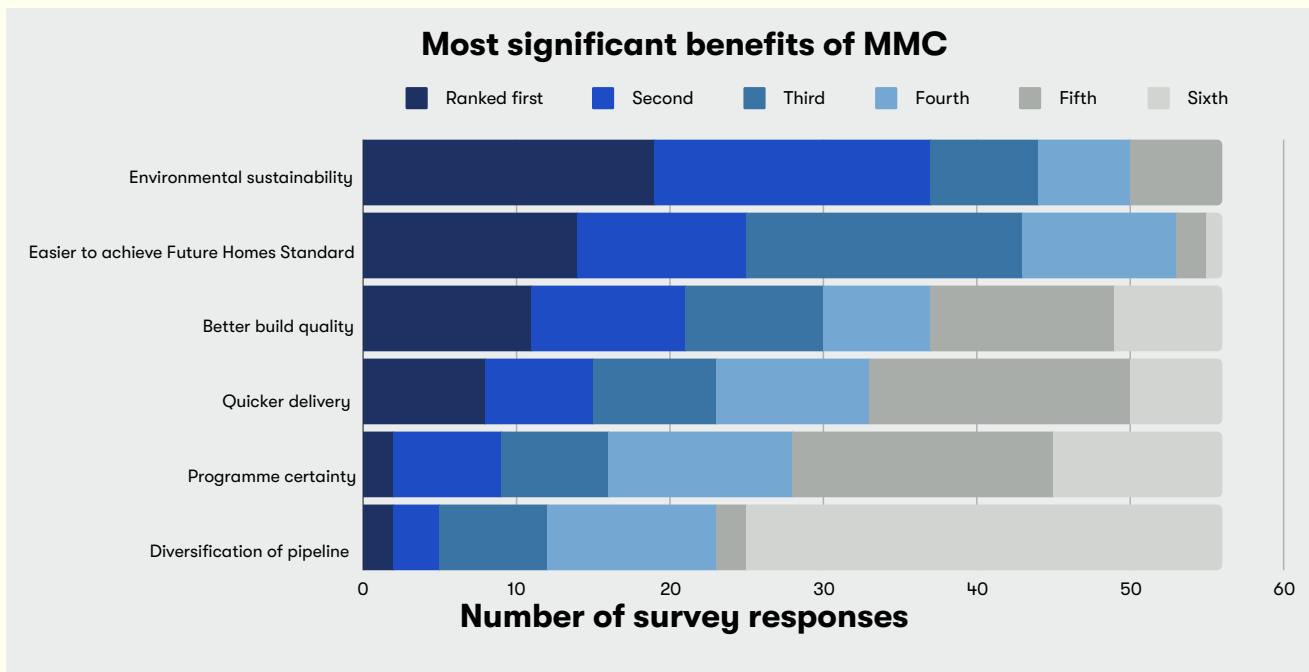
# Benefits and barriers

# The benefits of using MMC

Survey participants were asked to rank six potential benefits to their organisations of using MMC.

- ‘Environmental sustainability’ was seen as the most significant benefit, with two thirds (66%) of respondents ranking this as their first or second choice.
- ‘Easier to achieve Future Homes’ had the second highest number of first choices and was also second or third choice fairly frequently.
- ‘Better build quality’ and ‘Quicker delivery’ were selected as first choice by 20% and 14% of respondents respectively.
- Few respondents thought that ‘Programme certainty’ or ‘Diversification of pipeline’ were the most significant benefits.

Figure 1: the most significant benefits of MMC according to survey respondents, ranked first to sixth



# Other benefits

**“Our key goal is to reduce the costs for our residents in running their homes as fuel poverty and the cost of living crisis worsen.”**

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**“In areas of the country where local supply chain is challenging, [MMC] can be an enabler for more development. On regeneration projects, where speed is even more important and disruption to neighbouring residents is also of high importance, there can be additional benefits.”**

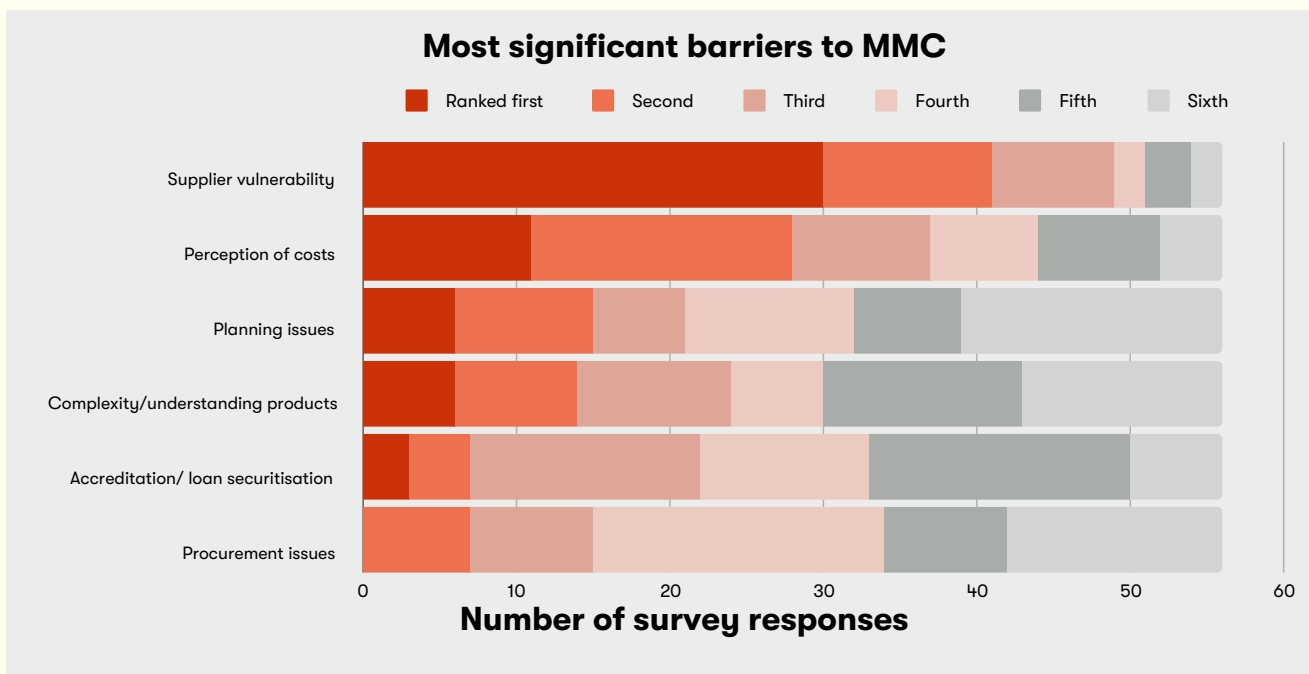
**“MMC can promote greater employment and training opportunities and attract younger people and excluded members of the community into the construction sector. Therefore, another benefit would be social value outputs.”**

# The barriers to using MMC

Survey participants were asked to rank the most significant of six barriers to increasing the use of MMC in their organisations.

- ‘Supplier vulnerability’ was seen as the most significant barrier. It was ranked as first choice most often. Nearly three quarters (73%) of respondents ranked this first or second.
- ‘Perception of costs’ had the second highest number of first choices and was also the most popular second choice.
- Results for ‘Planning issues’ and ‘Complexity/understanding products’ were more mixed. For example, while about a quarter of respondents ranked ‘Planning issues’ as first or second in significance, 43% ranked this as fifth or sixth.
- ‘Procurement issues’ was seen as the least significant barrier.

Figure 2: the most significant barriers to MMC according to survey respondents, ranked first to sixth



# Other barriers

**“Cost remains the biggest barrier on the majority of sites we build.”**

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**“The market needs some consolidation - it feels a little like we are back in the 1970s and everyone is a double glazing company. We are looking at MMC and classing them all the same and hearing the same messages - for example, quality is a given, so what else does it offer?”**

**“Current market conditions and the volatile contractor and supplier market are significant barriers to the use of MMC. We are a supporter of MMC but are unable to speak positively about our experience to date.”**

# Conclusion

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The last few years of using Modern Methods of Construction have generated a number of important lessons for housing associations.

While there has been a lack of standardisation and volume - typical of an emerging industry - this has meant that the sector has collaborated and shared lessons in a way that shows both confidence and promise.

We hope to continue this survey to chart the sector's challenges, opportunities and growth in coming years and are very grateful to all the organisations that have participated to date. Please do get in touch with feedback or for more information about the survey and its findings at [info@buildingbetter.org.uk](mailto:info@buildingbetter.org.uk)

Three things we can infer from the survey findings are:

1. The sector is delivering more MMC homes than it might think.
2. We are already starting to see signs of the MMC industry maturing.
3. Government support via both demand and supply side interventions has been absolutely critical to getting the industry to this point.

# About the NHF

The National Housing Federation (NHF) is the voice of England's housing associations. Its members provide homes for around six million people and are driven by a social purpose: providing good quality housing that people can afford.

The NHF supports its members to deliver that social purpose, with ambitious work that leads to positive change.

# About Building Better

Building Better, backed by the National Housing Federation, is an alliance of housing associations and local authorities working together to increase the use of modern methods of construction (MMC) in the social housing sector.

Building Better's mission is to build the highest quality homes that produce and emit less carbon, have greater durability and are more affordable to run. It does this by aggregating demand for new build homes delivered through our procurement routes to rigorously assessed, UK based manufacturers.

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